

WHAT IS CLAIMED IS:

1 1. A method for proactively managing a fault in a video and data network
2 comprising:

3 collecting network correlation data for the fault;

4 automatically performing a physical connectivity test of the video and data
5 network;

6 collecting physical connectivity data from the physical connectivity test;

7 automatically performing a virtual connectivity test of the video and data
8 network;

9 collecting virtual connectivity data from the virtual connectivity test;

10 automatically correlating the network correlation data, physical connectivity
11 data, and virtual connectivity data based on the fault; and

12 providing a defined resolution procedure for resolving the fault using the
13 correlated network correlation data, physical connectivity data, and virtual connectivity data.

14 2. The method of claim 1, wherein the video and data network comprises
15 a Digital Subscriber Line (xDSL) network.

16 3. The method of claim 1, wherein the video and data network comprises
17 a Very high bit rate DSL (VDSL) network.

18 4. The method of claim 1, wherein collecting network correlation data
19 comprises collecting data for upstream and downstream physical network elements from the
20 fault.

21 5. The method of claim 1, wherein collecting network correlation data
22 comprises collecting data from a root cause analysis.

23 6. The method of claim 1, wherein the physical connectivity test
24 comprises a Physical Loop Test.

25 7. The method of claim 6, wherein the Physical Loop Test is de-coupled
26 from a Plain Old Telephone Service (POTS) tool.

27 8. The method of claim 1, wherein the virtual connectivity test comprises
28 an Operations And Maintenance (OAM) test.

- 1 9. The method of claim 8, further comprising initiating the OAM test
2 with a service area identifier.
- 1 10. The method of claim 9, wherein the service area identifier comprises a
2 telephone number.
- 1 11. The method of claim 1, further comprising creating a repair ticket for
2 the fault.
- 1 12. The method of claim 1, further comprising dispatching a technician to
2 fix the fault.
- 1 13. The method of claim 1, further comprising fixing the fault using the
2 pre-defined resolution procedure.